

What is QGIS & Why is it Useful?

QGIS is a free, open-source geographic information system (GIS) software package you can use to create, analyze, and process geographic data. This software is particularly relevant to FCC Form 477 because it can be used to create the list of census blocks that best represent the broadband deployment footprint of your company for the Fixed Broadband Deployment section of the form.¹

You can use QGIS to create a list of blocks based on an area or areas you draw on the map yourself, or from existing GIS-compatible map files (a shapefile, for example). This guide explains how to use QGIS to draw an area on a map and enumerate the list of census blocks that are either entirely or partially contained therein. QGIS is not the only software that can do this.²

This example utilizes 2010 data for example purposes. You would use 2020 Census data for any filings beginning with the December 31, 2021 filing period. Note that you must use 2020 geographies.

How to...

Here's an example of how to generate a list of blocks from an area you draw on a map. This covers the whole process, from downloading and installing the software to offloading the results to Excel.

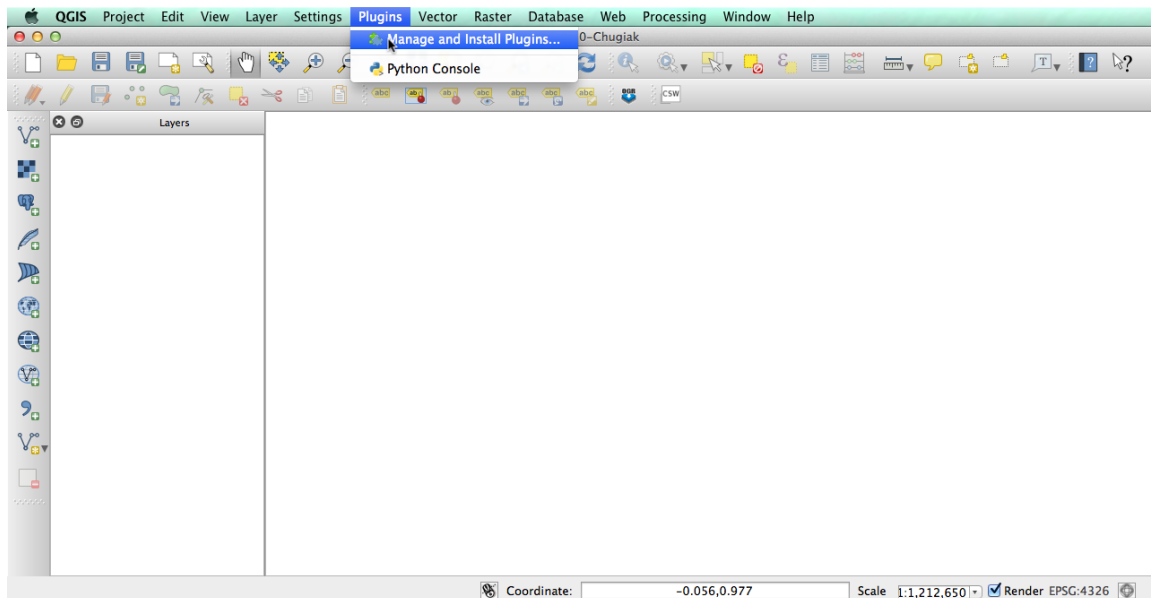
1. **Download and Install QGIS** from <http://qgis.org/en/site/forusers/download.html>. *Note: you may need administrative rights to install the software.*
 - A. Mac
Note: you may need to temporarily change your security permissions the first time you run the program
 - i. Download the GDAL Complete package from http://www.kyngchaos.com/software/frameworks#gdal_complete (http://www.kyngchaos.com/files/software/frameworks/GDAL_Complete-1.11.dmg). GDAL (Geospatial Data Abstraction Library) is a translator library for geospatial data formats and QGIS for Mac will not run without it.
 - ii. Download QGIS from <http://www.kyngchaos.com/software/qgis> (<http://www.kyngchaos.com/files/software/qgis/QGIS-2.4.0-1.dmg>)
 - iii. Double-click each dmg file to mount it.
 - iv. Double-click the GDAL Complete.pkg and the NumPY.pkg; and follow the instructions from the installer.
 - v. Double-click the Install QGIS.pkg and follow the instructions from the installer.

¹ Recall that facilities-based providers of fixed broadband Internet access must report a list – uploaded as a delimited, plain text/CSV file – of all census blocks in which the filer (including affiliates) makes broadband connections available to end-user premises. For more information about this requirement, see Section 5.3 of the [Form 477 Instructions](#).

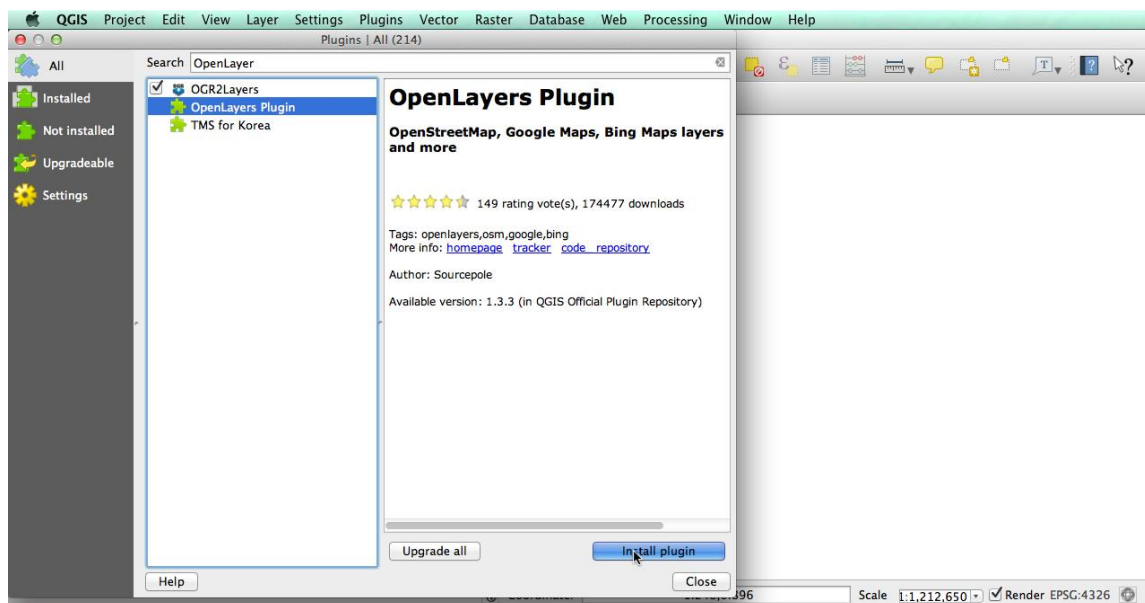
² The choice by staff to use certain software packages and references in creating the illustration below does not imply the endorsement, approval, or authorization of the software packages or references by the FCC. The FCC does not endorse or recommend any particular product or application for creating a list of census blocks to submit as part of the Form 477 data collection. Rather, the following illustration is intended only to give an example of how a service provider can generate a list of census block IDs that can be used in conjunction with the Form 477 filing process and should not be construed as an endorsement or warranty of any particular software package or reference.

- B. Windows
 - i. Download the installer file appropriate for your computer (either 32-bit or 64-bit; either Stand-alone or Network) and follow the instructions from the installer.
2. **Download census block boundaries from U.S. Census** (TIGER shapefiles for block geometries). **Note that you must use 2010 geographies for this example.**
 - A. Go to <https://www.census.gov/geo/maps-data/data/tiger-line.html>
 - B. Click on the 2010 tab and then click Download. **You must use 2010 geographies.**
 - C. Click on FTP Site (files arranged by state and county FIPS codes) or Web Interface. Either method will allow a download of an entire state or a county within a state. The files on the FTP Site are named by state and county FIPS codes, so consult our [County File Reference](#) and [State File Reference](#) to determine which files you need.
 - D. Download the zip file associated with the state(s) or counties of interest.
 - i. Mac: drag the zip file to a convenient location.
 - ii. Windows: after clicking the link to the zip file, a dialog box will open. Save the file to a convenient location.
 - E. Optional: From the 2010 tab, you can also click on Special Release and follow the instructions to access 2010 block shapes linked with the select demographic data described (<ftp://ftp2.census.gov/geo/tiger/TIGER2010BLKPOPHU/>). You can only download state-level data (use the lookup table below to see what state is appropriate).
3. **Open QGIS** and enable a “base layer” road map to help identify landmarks and areas of interest. You may choose any street map, or none at all; the directions below enable Google Streets as the base layer.

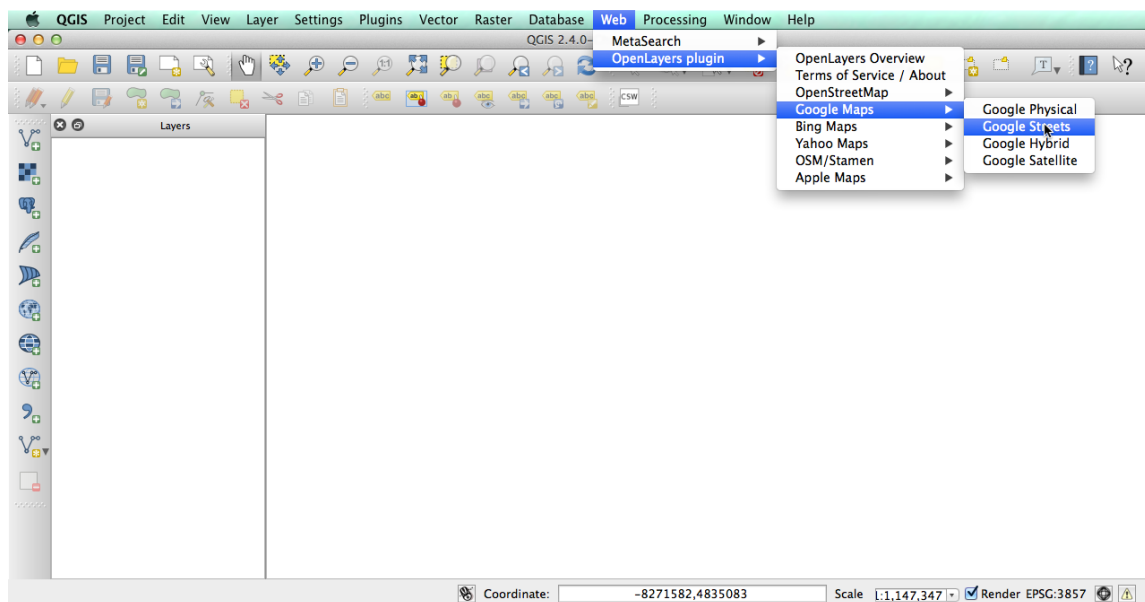
- A. From the Plugins menu, click Manage and Install Plugins...



- B. Search for OpenLayers Plugin; click Install plugin. Close the Plugins window.



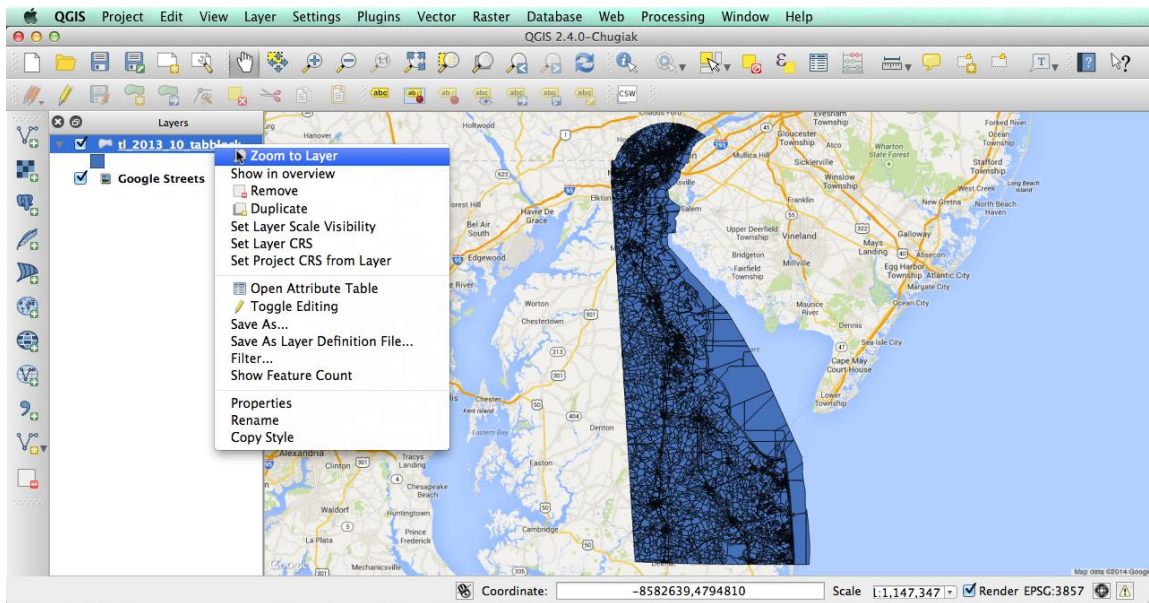
- C. Under the Web menu, click OpenLayers plugin and click Add Google Streets layer. Note that the OpenLayers plugin menu may be in different places in different versions of QGIS.



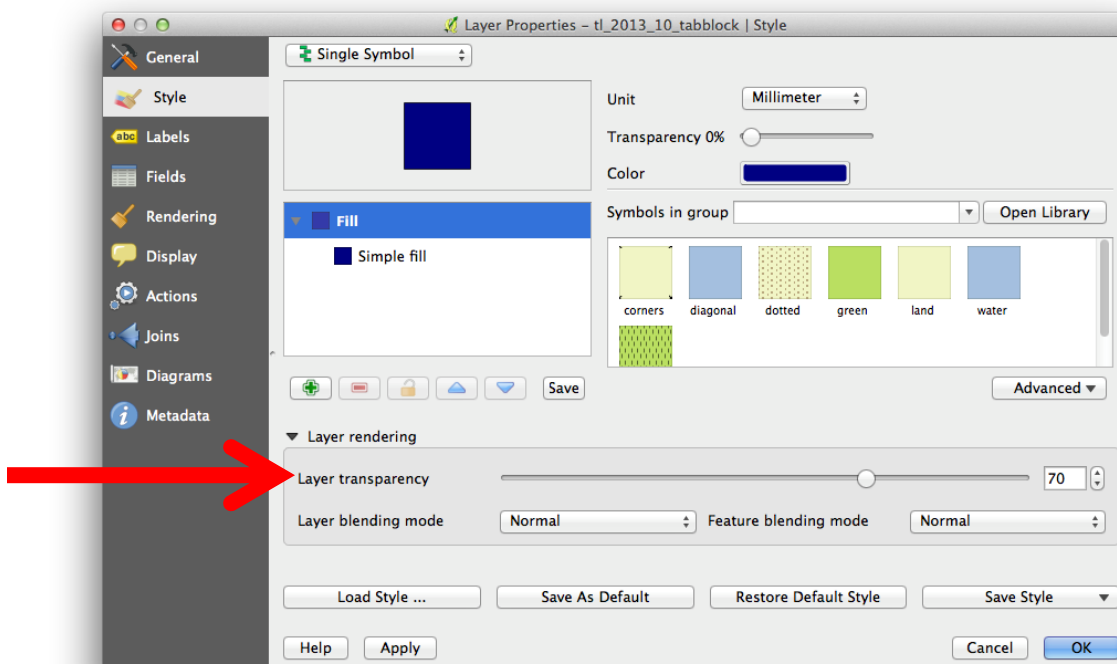
4. Load the block map for the county or state you downloaded.

- Unzip the zip file you downloaded into a convenient directory.
- In QGIS, browse to the directory into which you extracted the zip file and double-click on the .shp file to open it in QGIS.
- Right click on the block layer in the left-hand menu and click on Zoom to Layer Extent to zoom to where the blocks shapes are located.

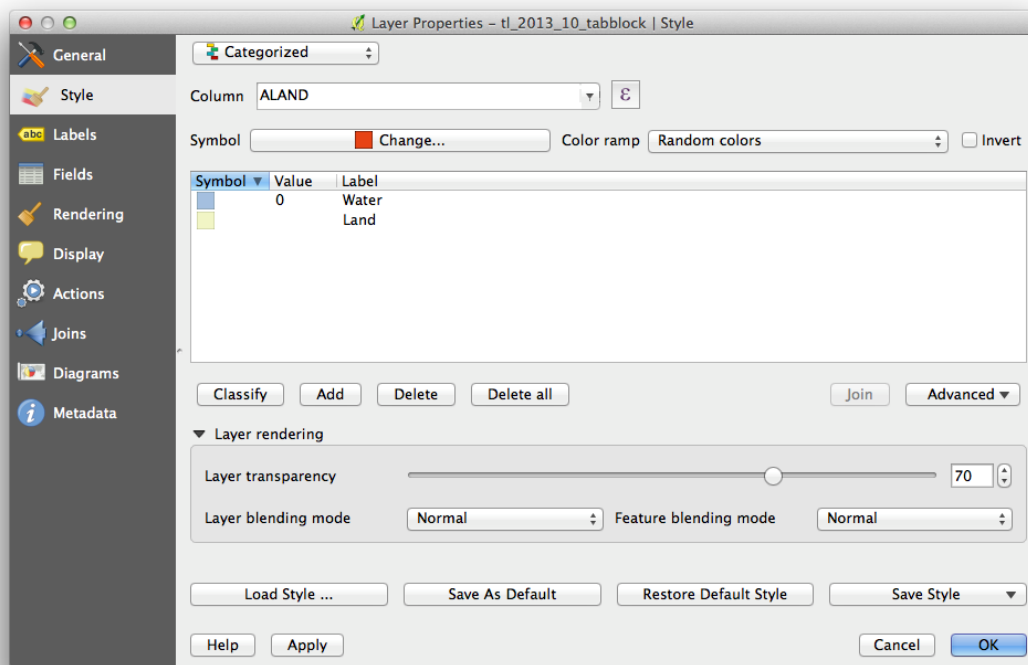
- D. Each of these steps can take some time to process.
- E. If the block shapes do not appear, you may need to zoom the map to the correct location. Use the “zoom to layer” option by right-clicking on the layer and hitting Zoom to Layer.



- F. The block shapes could also be behind the street maps. If so, go to the Layers menu and drag the block layer to the top of the list.
- G. *Optional*: modify the display of the block shapes to make it easier to see both the blocks and the underlying base map.
 - i. Make the block layer semi-transparent so you can see the underlying street map.
 1. Double-click the block map layer.
 2. Click on the Style tab.
 3. Slide the Layer transparency slider to 50-90%.



4. Click OK.
- ii. Differentiate blocks that are all water from those that include at least some land.
 1. Double-click the block map layer.
 2. Click on the Style tab.
 3. Click on the pull-down menu on the left that says Single Symbol and change it to Categorized.
 4. Click on the pull-down menu to the right of Column and choose ALAND10 (land area 2010).
 5. Click Add below the large window.
 6. Click on the Value column, type in 0. Click on the Label column and type in Water.
 7. Click on the small colored box on the left and pick a color for water.
 8. Repeat the process: click Add but this time, leave the Value column blank; Click on the Label column and type in Land; pick a color for land.
 9. Hit OK.

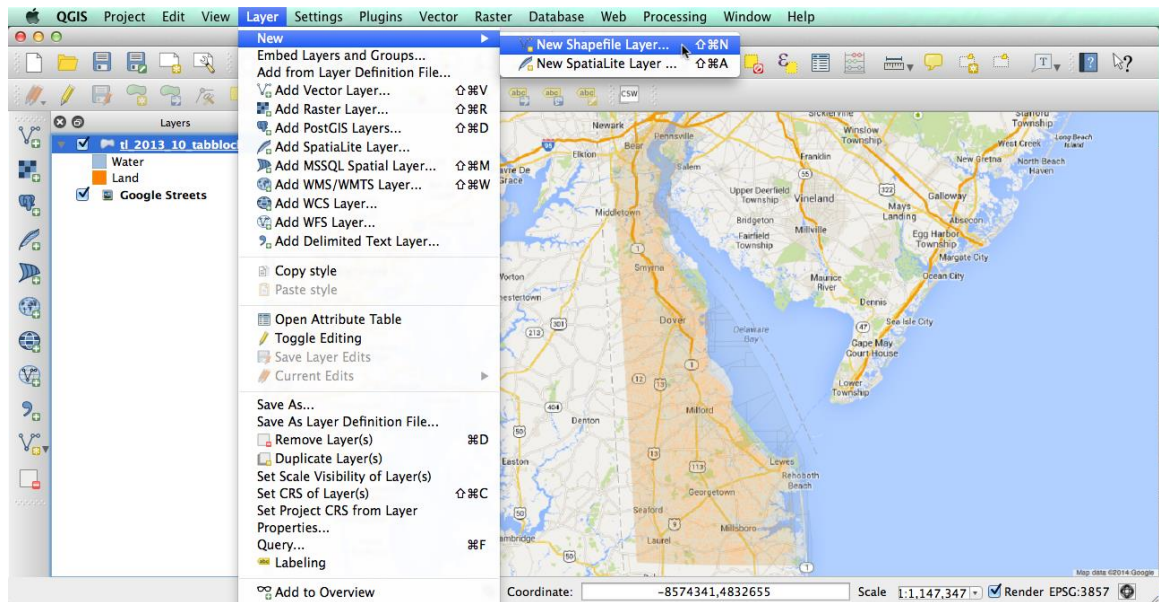


5. Load or create a shapefile that represents your service area.

- A. If you have a shapefile already (e.g., if you have submitted shapefiles as part of the SBI or another data collection), load that shapefile into QGIS.

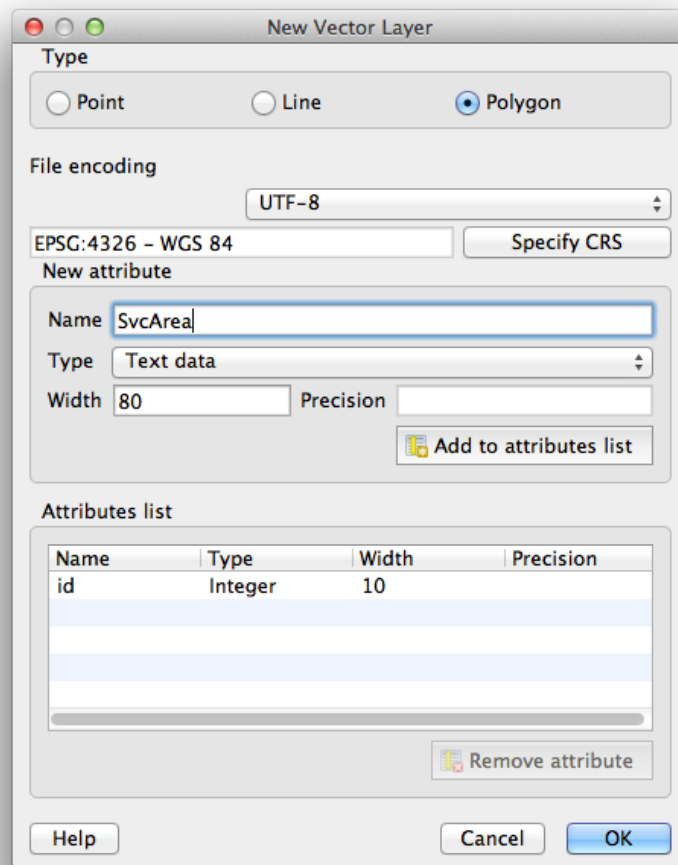
Note: representing the spherical shape of the surface of the earth on a flat map requires projecting data from the three-dimensional source to the two-dimensional map. The U.S. Census shapefiles were created using EPSG: 4269 – NAD83 while Google Streets uses EPSG: 38578 – WGS 84 /Pseudo Mercator. If your shapefile was created with a different projection, QGIS will overlay it onto the blocks; but it is possible that the different projection will lead the shape to shift or change shape; please confirm that the shape still represents the area of interest.

- i. Browse to and double click on the .shp file.
 - ii. Confirm that the shape represents the area of interest.
- B. If you do not already have a shapefile, you can “draw” one onto the map using one of the QGIS tools.
 - i. From the Layer menu, click New then New Shapefile Layer.

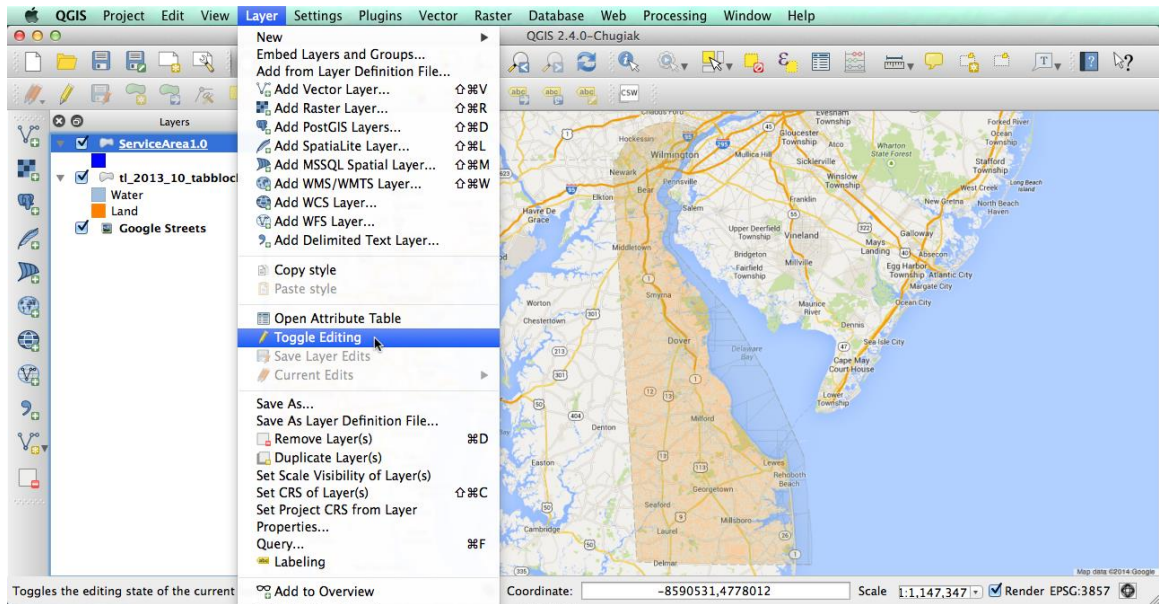


- ii. In the dialog box that opens, click polygon. Name the shape and hit OK. Find a place to store the shapefile of this new layer, name it, and hit OK.

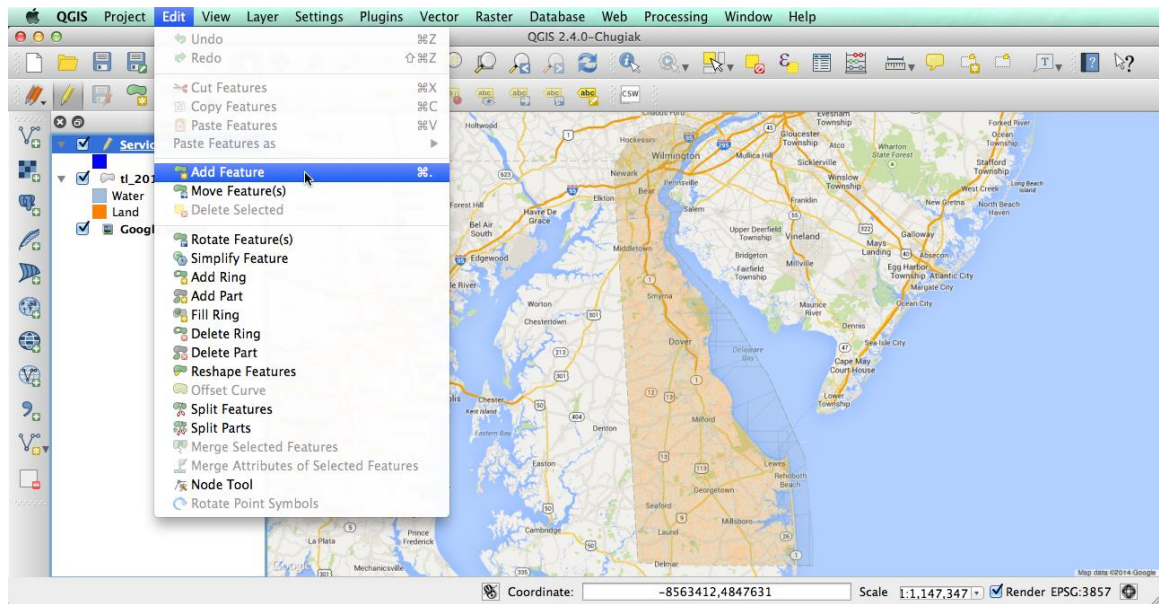
*Note: these instructions leave the default projection as EPSG: 4326 – WGS 84. You **can** use other projections but please confirm that the final shape represents the area of interest.*



- iii. Turn on editing using the Layer menu; or by right-clicking on the shape and clicking on Toggle Editing; or by clicking on the Toggle Editing button (shaped like a pencil).



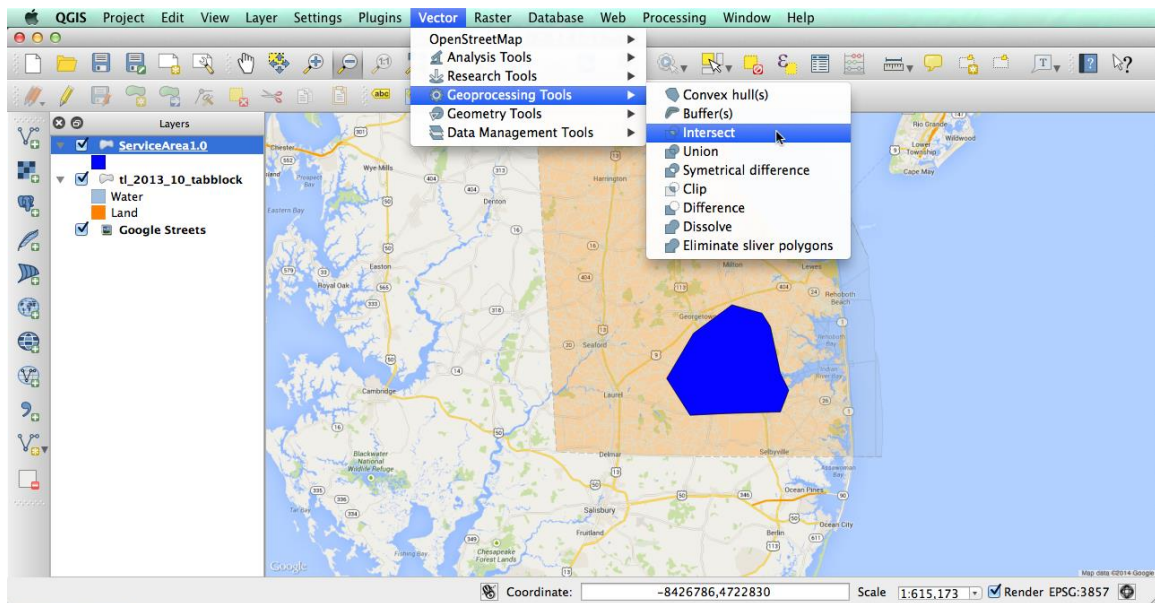
iv. Click on Edit and then Add Feature.



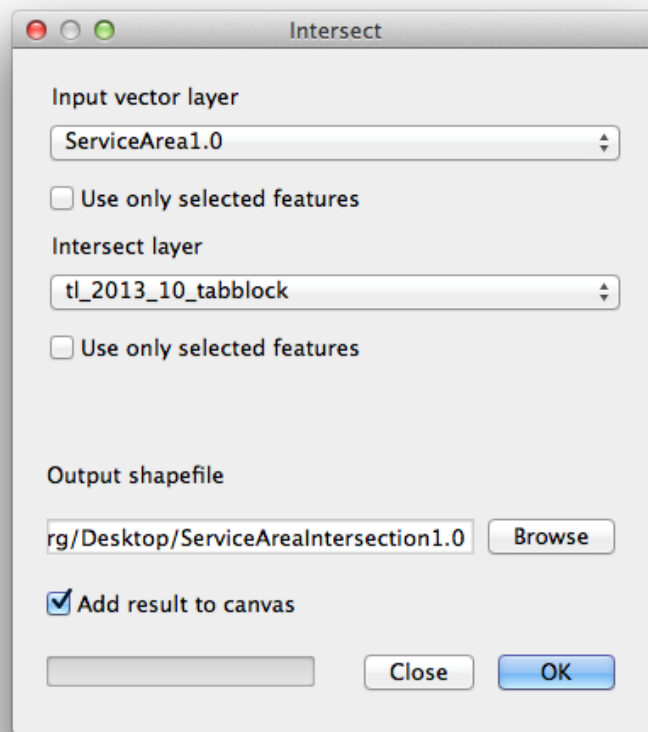
- v. On the map, click on the points that outline the shape (the outline of the shape may appear odd as you create it). Right click at the last point to close the shape.
- vi. Type in an id for this shape (like “1”).
- vii. You can change the appearance of this shape as you did for the census block shapes if desired.
- viii. You can edit the shape by clicking on Node Tool (on the Edit menu). If helpful, you can zoom in on the area of interest to better see the streets and other features.
 - 1. You can move the end points (nodes) by clicking and dragging them.
 - 2. You can also move lines (edges) by clicking and dragging them.
 - 3. Double click on a line to add a new node.
 - 4. Click to highlight a node and hit the ‘delete’ key to remove a node.
- ix. You can create additional shapes if needed (e.g., if you have multiple service areas) with different id numbers.
- x. Turn off editing mode by clicking on Toggle Editing.
- xi. Save the changes to the shape.

6. Intersect your service area with census block boundaries to identify which blocks intersect the service-area shape in whole or in part.

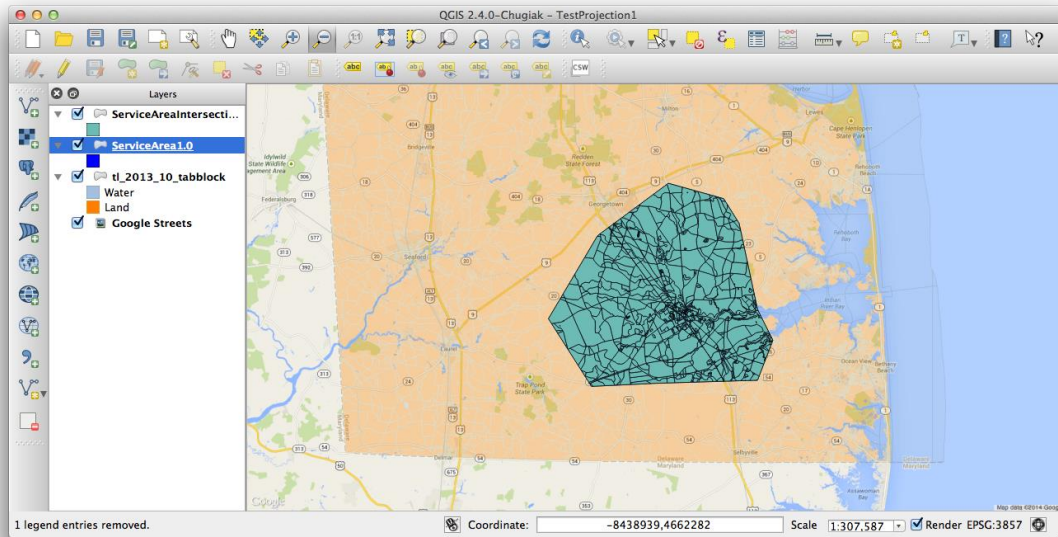
A. Click on Vector then Geoprocessing Tools then Intersect.



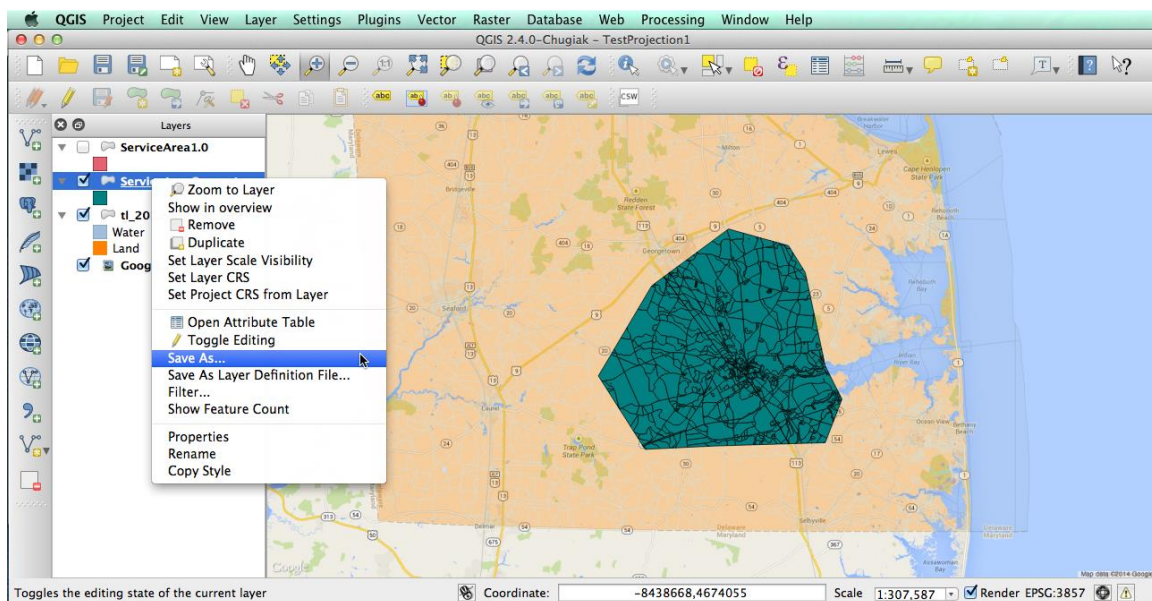
- B. Select the shape that represents the area of interest in the top pull-down menu (the first Input Vector Layer).
- C. Select the block layer in the second pull-down menu.
- D. Click the Browse button to find a location to store the intersected shape and hit Save.
- E. Click on Add result to canvas.



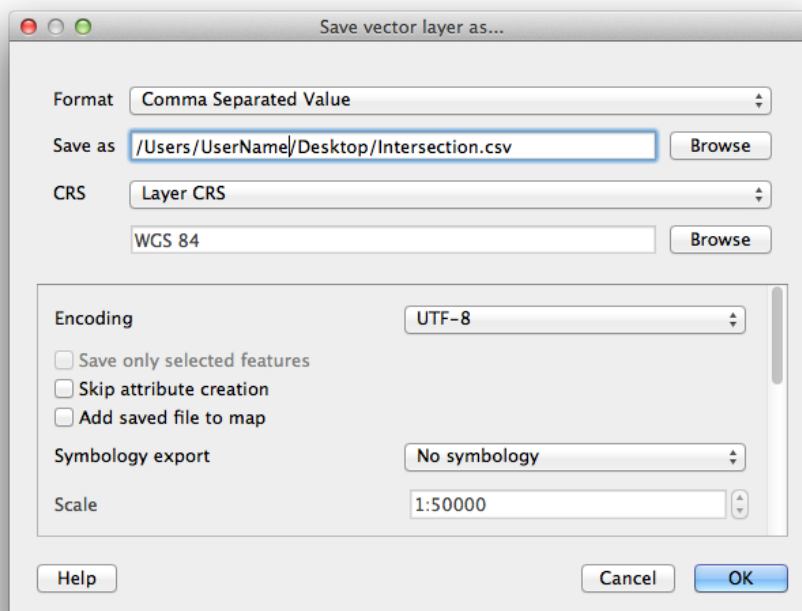
- F. Then click OK. The process could take several minutes to complete. You won't see any feedback from QGIS while processing is occurring.
- G. Click Close.
- H. When the process is complete you should see a new shape with the outline of the shape you created with internal lines showing the block boundaries.



- I. You may need to turn off the service shape you loaded and the block layer to see the result.
7. **Copy the list of blocks** to the program of your choice to create the file to submit to FCC as part of the Form 477 data collection.
 - A. Option one: save the attribute table as a Comma Separated Value (CSV) file
You will need to follow the instructions below to open this .csv file in Excel or another spreadsheet program without corrupting the census block codes.
 - i. Right click on the newly created intersection shape and choose Save As...



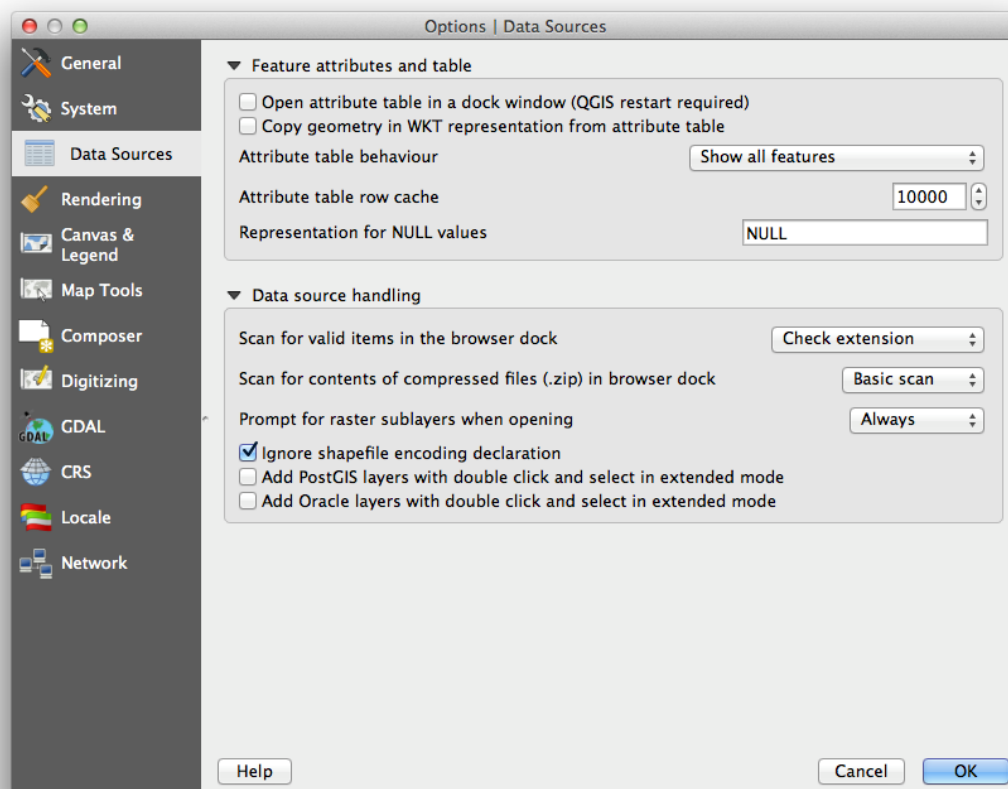
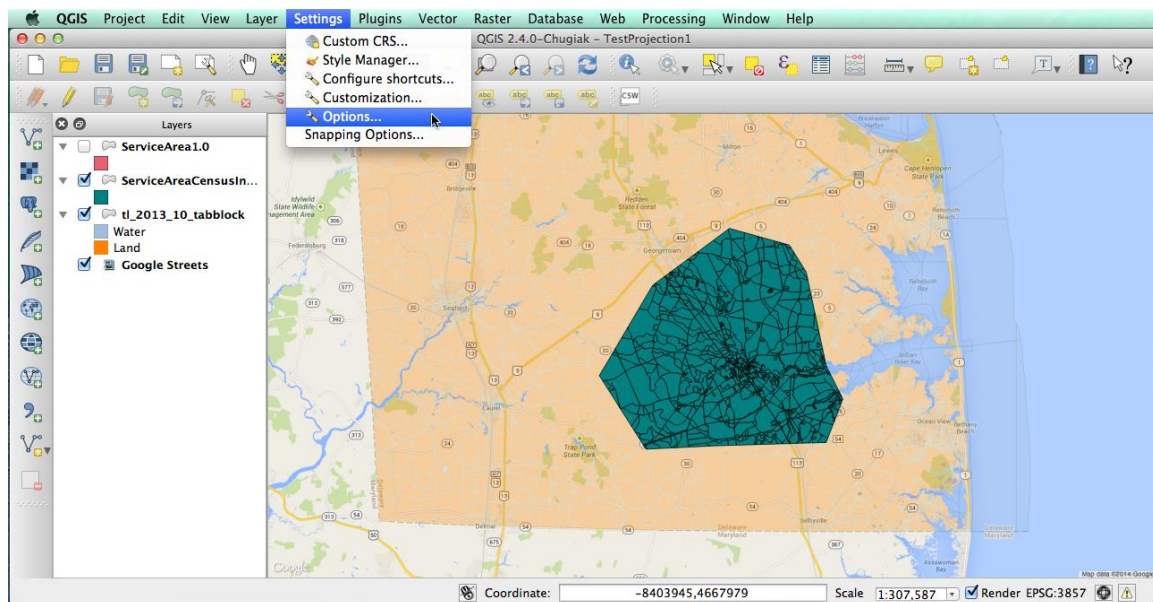
- ii. Select Comma Separated Value and choose a file name and location to save the .csv file. This will save only information from the attribute table (including the information of interest about Census block IDs), but will not save the geometry information.



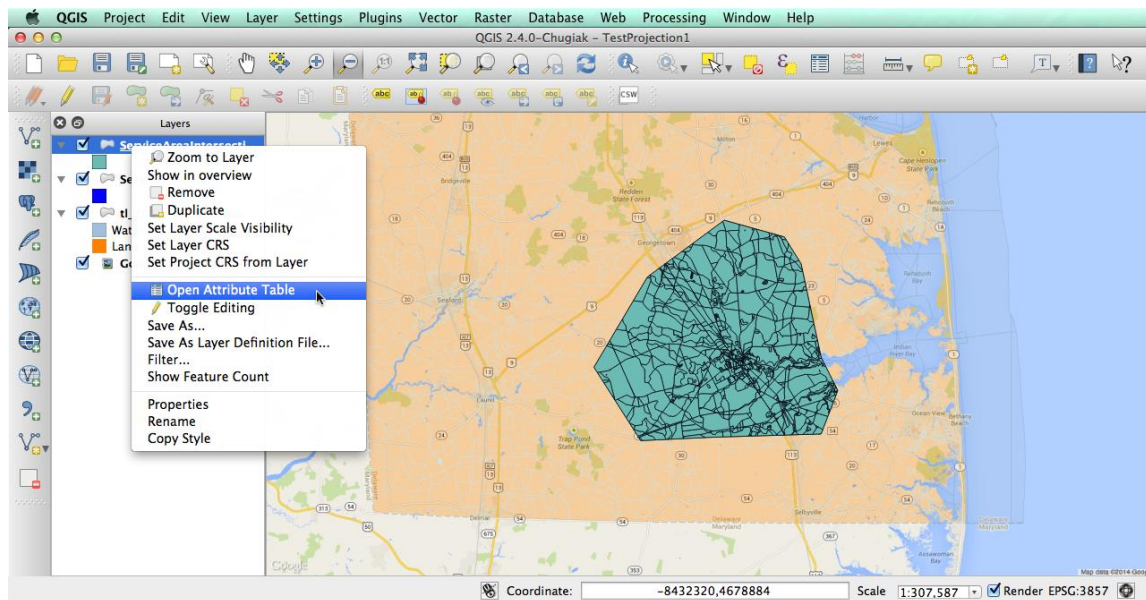
- B. Option two: copy and paste information from the attribute table into the program of your choice

Pasting census block IDs into spreadsheet programs like Excel can corrupt the block codes. Please read the instructions below to avoid such problems.

- i. Make sure QGIS will include only the information shown on the attribute table and not the geometry when you copy. As shown below, go to Options... and select the Data Sources tab. Make sure the box next to "Copy geometry in WKT representation from attribute table" is NOT checked. Click OK.



- ii. Right click on the newly created intersection layer.
- iii. Click on Open Attribute Table. The first field shows the name of the service area polygon (we suggested the name “1” above). The remaining fields show information from the census block map file you downloaded from TIGER.



- iv. The field of most interest is titled GEOID10. This is the full 15-digit census block code for each block that intersected, in whole or in part, the service area(s) you created in step 5.B above. **You need the full 15-digit code (not the four-digit BLOCKCE10 or NAME10 fields).**
- v. Select all rows by clicking in the upper-left-hand box just above the data (the corner above the row labels and column labels). Copy the data to the Clipboard by typing Command-C or Ctrl-C or hitting the Copy button. Note that it can take some time for the information to be copied.

Attribute table - ServiceAreaIntersection1.0 :: Features total: 1021, filtered: 1021, selected: 1021

	id	STATEFP	COUNTYFP	TRACTCE10	BLOCKCE10	SUFFIX1CE	GEOID	NAME	MTFCC	UR10	UAC
0	1	10	005	10	005	050802	2085	Block 2085	G5040	R	NULL
1	1	10	005	10	005	050802	2054	Block 2054	G5040	R	NULL
2	1	10	005	10	005	050802	2076	Block 2076	G5040	R	NULL
3	1	10	005	10	005	050802	2077	Block 2077	G5040	R	NULL
4	1	10	005	10	005	050802	2049	Block 2049	G5040	R	NULL
5	1	10	005	10	005	050802	2081	Block 2081	G5040	R	NULL
6	1	10	005	10	005	050802	2082	Block 2082	G5040	R	NULL
7	1	10	005	10	005	050504	3008	Block 3008	G5040	R	NULL
8	1	10	005	10	005	050802	2093	Block 2093	G5040	R	NULL
9	1	10	005	10	005	050802	2089	Block 2089	G5040	R	NULL
10	1	10	005	10	005	050802	2090	Block 2090	G5040	R	NULL
11	1	10	005	10	005	050802	2047	Block 2047	G5040	R	NULL
12	1	10	005	10	005	050802	2088	Block 2088	G5040	R	NULL
13	1	10	005	10	005	050802	2038	Block 2038	G5040	R	NULL
14	1	10	005	10	005	050802	2048	Block 2048	G5040	R	NULL
15	1	10	005	10	005	050802	2052	Block 2052	G5040	R	NULL
16	1	10	005	10	005	050701	1003	Block 1003	G5040	R	NULL
17	1	10	005	10	005	050802	2053	Block 2053	G5040	R	NULL
18	1	10	005	10	005	050802	2084	Block 2084	G5040	R	NULL
19	1	10	005	10	005	050802	2078	Block 2078	G5040	R	NULL
20	1	10	005	10	005	050802	2083	Block 2083	G5040	R	NULL
21	1	10	005	10	005	050701	1017	Block 1017	G5040	R	NULL
22	1	10	005	10	005	050701	1001	Block 1001	G5040	R	NULL
23	1	10	005	10	005	050701	1006	Block 1006	G5040	R	NULL
24	1	10	005	10	005	050701	1044	Block 1044	G5040	R	NULL
25	1	10	005	10	005	050701	1038	Block 1038	G5040	R	NULL
26	1	10	005	10	005	050701	1040	Block 1040	G5040	R	NULL
27	1	10	005	10	005	050701	1002	Block 1002	G5040	R	NULL
28	1	10	005	10	005	050701	1004	Block 1004	G5040	R	NULL

Show All Features

- vi. Paste into a file where you can access the data to prepare the filing.
- vii. After copying the data, hit Unselect all (Command-U or Ctrl-U) to remove the highlighting.

8. Save the Project to maintain all this work and revisit it later.

9. Read the list of blocks into the program of your choice, either by opening the .csv file you created or by pasting the table you copied.

Spreadsheet programs like Excel can corrupt the census block codes because they tend to treat them as numbers by default. Leading zeroes are dropped (so the state FIPS code for Alabama appears as "1" instead of "01" and 15-digit block codes are often converted into scientific notation (ending with E+13 or E+14). Once the format of the block codes has been changed in these ways, it is very difficult to change back to the proper display. The instructions below will help avoid these problems.

Census block codes must match across every digit. When you submit census block codes, ensure that they display correctly with all 15 digits visible.

A. When pasting data into a workbook...

- i. If you know which columns will contain the geography code or codes, highlight the column(s) by clicking on the header (the cell at the top with the letter), then select Text as the format.
- ii. If you do not know which columns will contain the geography code or codes, paste the data into the spreadsheet and find the columns. Click on the header(s) and select Text as the format. This adjusts the format for the column but does not correct the conversion that has already taken place. Therefore paste the data into the spreadsheet again and confirm that all the geography codes are properly displayed.

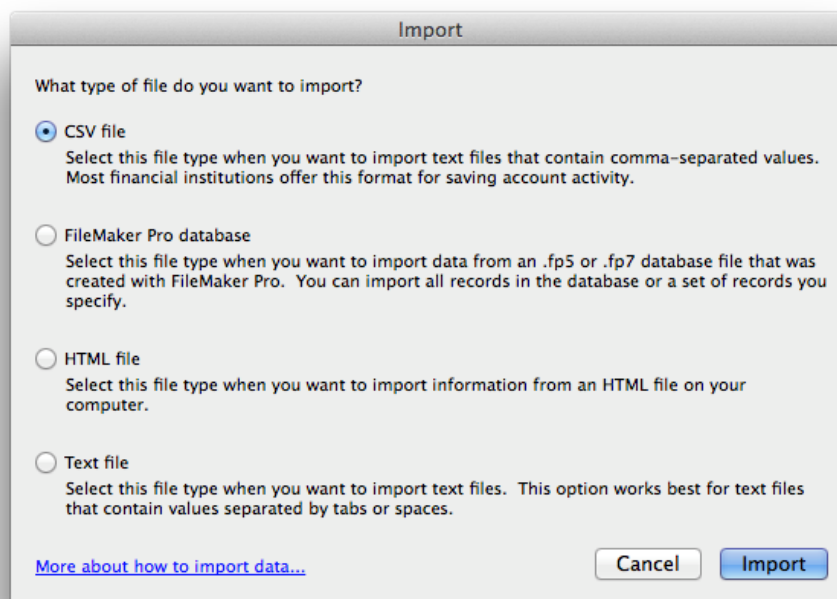
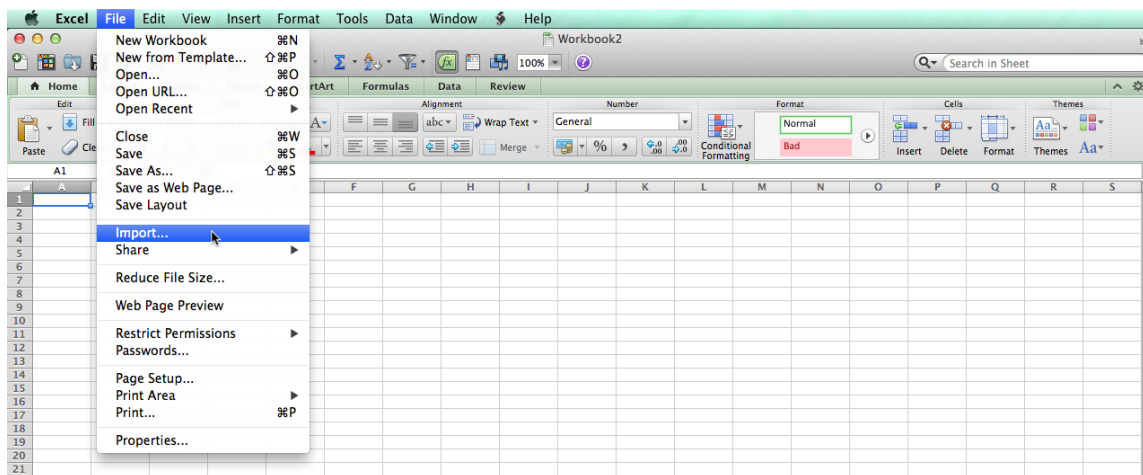
After you change the column type to Text and paste in the data from the QGIS attribute table, Excel may warn you that you have a number stored as text; this is fine.

The screenshot shows an Excel spreadsheet with the following columns: A (id), B (STATEFP), C (COUNTYFP), D (TRACTFP), E (COUNTYFP1), F (TRACTFP1), G (BLOCKCE10), H (SUFFIXCE), I (GEOID), J (NAME), K (MTFCC), L (UR10), M (UACE10), N (FUNSTAT), O (ALAND), P (AWATER), Q (INTPTLAT), R (INTPTLON), S.

The data rows show various census blocks with their corresponding identifiers and names. A warning dialog box is displayed over the 'GEOID' column, indicating that some cells contain numbers stored as text.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
id	STATEFP	COUNTYFP	TRACTFP	COUNTYFP1	TRACTFP1	BLOCKCE10	SUFFIXCE	GEOID	NAME	MTFCC	UR10	UACE10	FUNSTAT	ALAND	AWATER	INTPTLAT	INTPTLON	
1	1	10	5	10	5	50802	2085	1.0005E+14	Block 2085	GS040	R		S	1716478	0	38.6852574	-75.255154	
2	1	10	5	10	5	50802	2054	1.0005E+14	Block 2054	GS040	R		S	1449889	0	38.6955332	-75.254132	
3	1	10	5	10	5	50802	2076	1.0005E+14	Block 2076	GS040	R		S	257284	0	38.6938739	-75.246414	
4	1	10	5	10	5	50802	2077	1.0005E+14	Block 2077	GS040	R		S	342831	0	38.6890467	-75.244857	
5	1	10	5	10	5	50802	2049	1.0005E+14	Block 2049	GS040	R		S	1280864	0	38.699232	-75.270867	
6	1	10	5	10	5	50802	2081	1.0005E+14	Block 2081	GS040	R		S	1779499	0	38.6862307	-75.267204	
7	1	10	5	10	5	50802	2082	1.0005E+14	Block 2082	GS040	R		S	72392	0	38.6937698	-75.26506	
8	1	10	5	10	5	50504	3008	1.0005E+14	Block 3008	GS040	R		S	64195	0	38.6788896	-75.311885	
9	1	10	5	10	5	50802	2093	1.0005E+14	Block 2093	GS040	R		S	2365	0	38.6820259	-75.304195	
10	1	10	5	10	5	50802	2089	1.0005E+14	Block 2089	GS040	R		S	48383	0	38.6831946	-75.306923	
11	1	10	5	10	5	50802	2090	1.0005E+14	Block 2090	GS040	R		S	43040	0	38.6850622	-75.307964	
12	1	10	5	10	5	50802	2047	1.0005E+14	Block 2047	GS040	R		S	1690006	0	38.6840606	-75.286965	
13	1	10	5	10	5	50802	2088	1.0005E+14	Block 2088	GS040	R		S	1348405	0	38.689991	-75.304321	
14	1	10	5	10	5	50802	2038	1.0005E+14	Block 2038	GS040	R		S	2868	0	38.7003719	-75.289511	
15	1	10	5	10	5	50802	2048	1.0005E+14	Block 2048	GS040	R		S	575612	0	38.6960042	-75.278801	
16	1	10	5	10	5	50802	2052	1.0005E+14	Block 2052	GS040	R		S	103393	0	38.6977594	-75.261654	
17	1	10	5	10	5	50701	1003	1.0005E+14	Block 1003	GS040	R		S	364587	0	38.677224	-75.263637	
18	1	10	5	10	5	50802	2053	1.0005E+14	Block 2053	GS040	R		S	169070	0	38.6950764	-75.259553	
19	1	10	5	10	5	50802	2084	1.0005E+14	Block 2084	GS040	R		S	13231	0	38.6781514	-75.24554	
20	1	10	5	10	5	50802	2078	1.0005E+14	Block 2078	GS040	R		S	619231	0	38.6875275	-75.248833	
21	1	10	5	10	5	50802	2083	1.0005E+14	Block 2083	GS040	R		S	306939	0	38.6797364	-75.242311	
22	1	10	5	10	5	50701	1017	1.0005E+14	Block 1017	GS040	R		S	31743	0	38.6561048	-75.266785	
23	1	10	5	10	5	50701	1001	1.0005E+14	Block 1001	GS040	R		S	347704	0	38.6742433	-75.243747	
24	1	10	5	10	5	50701	1006	1.0005E+14	Block 1006	GS040	R		S	318472	0	38.6693306	-75.24185	
25	1	10	5	10	5	50701	1044	1.0005E+14	Block 1044	GS040	R		S	57159	0	38.6489973	-75.229028	
26	1	10	5	10	5	50701	1038	1.0005E+14	Block 1038	GS040	R		S	774898	0	38.6528403	-75.22882	
27	1	10	5	10	5	50701	1040	1.0005E+14	Block 1040	GS040	R		S	338565	0	38.6516111	-75.221153	
28	1	10	5	10	5	50701	1002	1.0005E+14	Block 1002	GS040	R		S	753246	0	38.673736	-75.251446	
29	1	10	5	10	5	50701	1004	1.0005E+14	Block 1004	GS040	R		S	3993929	0	38.6677684	-75.266666	
30	1	10	5	10	5	50802	2079	1.0005E+14	Block 2079	GS040	R		S	2267828	0	38.6811402	-75.231081	
31	1	10	5	10	5	50802	2037	1.0005E+14	Block 2037	GS040	R		S	118005	0	38.7032565	-75.279574	
32	1	10	5	10	5	50802	2036	1.0005E+14	Block 2036	GS040	R		S	3020673	0	38.7009827	-75.28776	
33	1	10	5	10	5	50802	2087	1.0005E+14	Block 2087	GS040	R		S	583051	0	38.6869231	-75.277559	
34	1	10	5	10	5	50701	1029	1.0005E+14	Block 1029	GS040	R		S	1512697	0	38.6729853	-75.285961	
35	1	10	5	10	5	50701	1005	1.0005E+14	Block 1005	GS040	R		S	892114	0	38.6673069	-75.281388	
36	1	10	5	10	5	50802	2046	1.0005E+14	Block 2046	GS040	R		S	1535393	0	38.70534	-75.305561	
37	1	10	5	10	5	50802	2045	1.0005E+14	Block 2045	GS040	R		S	1109581	0	38.7121073	-75.299195	
38	1	10	5	10	5	50504	2007	1.0005E+14	Block 2007	GS040	R		S	1988250	0	38.7032162	-75.321793	
39	1	10	5	10	5	50701	1027	1.0005E+14	Block 1027	GS040	R		S	765877	0	38.6758578	-75.297866	
40	1	10	5	10	5	50802	2092	1.0005E+14	Block 2092	GS040	R		S	328050	0	38.6824206	-75.297635	
41	1	10	5	10	5	50701	1049	1.0005E+14	Block 1049	GS040	R		S	14705	0	38.663237	-75.294579	
42	1	10	5	10	5	50504	1040	1.0005E+14	Block 1040	GS040	R		S	45078	0	38.6713731	-75.373771	
43	1	10	5	10	5	50504	1049	1.0005E+14	Block 1049	GS040	U	32950	S	9353	0	38.6684623	-75.376139	
44	1	10	5	10	5	50504	1038	1.0005E+14	Block 1038	GS040	U	32950	S	93831	0	38.6724448	-75.378654	
45	1	10	5	10	5	50504	1042	1.0005E+14	Block 1042	GS040	R		S	191346	0	38.6702329	-75.365165	
46	1	10	5	10	5	50504	1039	1.0005E+14	Block 1039	GS040	U	32950	S	539834	0	38.674927	-75.373295	
47	1	10	5	10	5	50504	1001	1.0005E+14	Block 1001	GS040	R		S	493726	0	38.6747811	-75.3444	

- B. When opening a CSV file containing a list of census block codes...
- Opening the file directly (either by using the Open... command or double-clicking the file itself) leads to the problematic default treatment of geography codes. Instead use the Import... command.
 - Click on Import..., select CSV, and hit OK.



- iii. Select the file and follow the instructions of the Text Import Wizard. First, choose Delimited.

Text Import Wizard – Step 1 of 3

The Text Wizard has determined that your data is Delimited.

If this is correct, choose Next, or choose the Data Type that best describes your data.

Original data type

Choose the file type that best describes your data:

☒ Delimited – Characters such as commas or tabs separate each field.

☐ Fixed width – Fields are aligned in columns with spaces between each field.

Start import at row: File origin:

Data preview

Preview of file Macintosh HD:Domain:fccnet.win.fcc.gov:Users:....:Intersection.csv.

1	id	STATEFP	COUNTYFP	STATEFP10	COUNTYFP10	TRACTCE10	BLOCKCE10	SUFFIX1CE	GEO
2	1	10	005	10	005	050802	2085	,,100050508022085	Block 2085,G5040,R,,S,1716478
3	1	10	005	10	005	050802	2054	,,100050508022054	Block 2054,G5040,R,,S,144989,
4	1	10	005	10	005	050802	2076	,,100050508022076	Block 2076,G5040,R,,S,257284,
5	1	10	005	10	005	050802	2077	,,100050508022077	Block 2077,G5040,R,,S,342831,
6	1	10	005	10	005	050802	2049	,,100050508022049	Block 2049,G5040,R,,S,1280864

Cancel < Back Next > Finish

Then make sure the box next to Comma is checked.

Text Import Wizard – Step 2 of 3

This screen lets you set the delimiters your data contains. You can see how your text is affected in the preview below.

Delimiters

☒ Tab ☐ Semicolon ☒ Comma

☐ Space ☐ Other:

☐ Treat consecutive delimiters as one

Text qualifier:

Data preview

id	STATEFP	COUNTYFP	STATEFP10	COUNTYFP10	TRACTCE10	BLOCKCE10	SUFFIX1CE	GEOID
1	10	005	10	005	050802	2085		100
1	10	005	10	005	050802	2054		100
1	10	005	10	005	050802	2076		100
1	10	005	10	005	050802	2077		100
1	10	005	10	005	050802	2049		100

Cancel < Back Next > Finish

Then find the column that contains the census block code, called GEOID. You will probably have to scroll to the right. Highlight that column and click the radio button next to Text. Click Finish.

Text Import Wizard – Step 3 of 3

This screen lets you select each column and set the Data Format.

'General' converts numeric values to numbers, date values to dates, and all remaining values to text.

Advanced...

Column data format

☐ General

☒ Text

☐ Date: MDY

☐ Do not import column (Skip)

Data preview

General	General	General	General	Text	General	General	General	General
YFP10	TRACTCE10	BLOCKCE10	SUFFIX1CE	GE0ID	NAME	MTFCC	UR10	JA
050802	2085			100050508022085	Block 2085	G5040	R	
050802	2054			100050508022054	Block 2054	G5040	R	
050802	2076			100050508022076	Block 2076	G5040	R	
050802	2077			100050508022077	Block 2077	G5040	R	
050802	2049			100050508022049	Block 2049	G5040	R	

Cancel < Back Next > Finish

- iv. Tell Excel where you want the new table to open and click OK.